

## **STIC Biotechnology Systems Branch**

### **RAW SEQUENCE LISTING**

### **ERROR REPORT**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/541,998  
Source: IFWP  
Date Processed by STIC: 8/3/06

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,
- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE **CHECKER VERSION 4.4.0 PROGRAM**, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

**<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>**

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<**<http://www.uspto.gov/ebc/efs/downloads/documents.htm>**> , **EFS Submission User Manual - ePAVE**)
2. **U.S. Postal Service:** Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. **Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05):**  
U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314

Revised 01/10/06



IFWP

## RAW SEQUENCE LISTING

DATE: 08/03/2006

PATENT APPLICATION: US/10/541,998

TIME: 09:50:26

Input Set : A:\19020.seq.txt

Output Set: N:\CRF4\08032006\J541998.raw

3 <110> APPLICANT: Collier, Greg  
 4 Walder, Ken  
 5 Segal, David  
 6 Foletta, Victoria  
 8 <120> TITLE OF INVENTION: OBESITY-RELATED GENES  
 10 <130> FILE REFERENCE: 19020  
 12 <140> CURRENT APPLICATION NUMBER: 10/541,998  
 13 <141> CURRENT FILING DATE: 2005-07-13  
 15 <160> NUMBER OF SEQ ID NOS: 13  
 17 <170> SOFTWARE: PatentIn version 3.1  
 19 <210> SEQ ID NO: 1  
 20 <211> LENGTH: 426  
 21 <212> TYPE: DNA  
 22 <213> ORGANISM: Psammomys obesus  
 24 <220> FEATURE:  
 25 <221> NAME/KEY: misc\_feature  
 26 <222> LOCATION: (336)..(366) (336)  
 27 <223> OTHER INFORMATION: n = any nucleotide sequence  
 30 <400> SEQUENCE: 1  
 31 ggacatcttt tcagccatga ggagctttct ggaaactcgg agttgatata gaaatatagg 60  
 33 aatataatca cgcaggctcc taacctggag aacattgagc tgtactggaa cagctacaac 120  
 35 aaccgccgag acctgaactt cgagcggagt ggtgagatga ccctcaagt ccctgtgatg 180  
 37 ctggtggtag gagaccaagc gcctcatgag gatgccgtgg tggagtgtaa ctcaaaactg 240  
 39 gacccacac agacctcgtt cctcaagatg gctgattctg gaggtcagcc acagctgacc 300  
 W--> 41 cagccaggca agctgactga ggctttcaag tacttntctg aaggcatggg ctacatggcc 360  
 43 tcctcctgca tgactcgctt atcgaggtct cgcacggcat ctttgaccag cgcagcatcc 420  
 45 attgat 426  
 48 <210> SEQ ID NO: 2  
 49 <211> LENGTH: 451  
 50 <212> TYPE: DNA  
 51 <213> ORGANISM: Psammomys obesus  
 53 <400> SEQUENCE: 2  
 54 gctggtaccg gtcgggaatt cccgggatat cgtcgaccca cgcgtccggt ggtggagaag 60  
 56 atcgctcctg ccgtgggttca cattgaactg tategcaaac ttcctttctc gaagagggag 120  
 58 gtgccagtgg cgagtgggtc cggatttatc gtgtctgagg atggactgat tgtgaccaat 180  
 60 gctcacgtgg tgaccaacaa aaacagggtc aagggttgagc tgaagaatgg agcaacctat 240  
 62 gaagctaaaa tcaaggatgt ggatgaaaag gcagacatcg cacttatcaa aattgaccac 300  
 64 cagggaaagc tgccagtctt gctgctgggc cgctcctcag agcttcgacc aggagagttt 360  
 66 gtggtcgcca tcggaagccc cttttccctt caaaacacag tcaccactgg gatcgctcag 420  
 68 accaccagc gaggcggcaa agagctgggg c 451  
 71 <210> SEQ ID NO: 3  
 72 <211> LENGTH: 478  
 73 <212> TYPE: DNA

see pg 1-7  
 Does Not Comply  
 Corrected Diskette Needed

FYI: 'n' can only represent a  
 single  
 nucleotide.

If "sequence"  
 denotes  
 more than  
 one nucleotide,  
 it is an  
 invalid  
 designation.  
 If you mean

'n' = any nucleotide,  
 that is valid.

(please check all  
 sequences showing n's)

## RAW SEQUENCE LISTING

DATE: 08/03/2006

PATENT APPLICATION: US/10/541,998

TIME: 09:50:26

Input Set : A:\19020.seq.txt

Output Set: N:\CRF4\08032006\J541998.raw

```

74 <213> ORGANISM: Psammomys obesus
77 <400> SEQUENCE: 3
78 tgacattttc tttccacctc ttatgatagc tgatatatac taaatcttta tacagaaatg      60
80 tcagtacttg aacaaattca aaacacattg gtttattaac ttttggtca tgcattggtt      120
82 attaggttca aattatacct gattcatcta tatttacttt taaaatgtgt ggtttcctca      180
84 ttttaaaagt aaaactaaac agtgcttttg gaatttctaa gctactaatt gttgatagat      240
86 acagcctgtg tctagtaaaa tagttttgtg ggtgtgggtt ctatctttcc atgaaaaagt      300
88 gggagggtga agttagtttg gttagtgcct aatagttaaa tttatataaa ataagaatga      360
90 gcatttggtg tctgtatgaa agggccctaa atcaaaatga ttatccataa tcaatcttta      420
92 ttcttgtttt ataaaaacca aagggcactc attggttaag tgtgctgaga tagaaaag      478
95 <210> SEQ ID NO: 4
96 <211> LENGTH: 1884
97 <212> TYPE: DNA
98 <213> ORGANISM: Psammomys obesus
100 <220> FEATURE:
101 <221> NAME/KEY: misc_feature
102 <222> LOCATION: (609)..(609)
103 <223> OTHER INFORMATION: n = any nucleotide sequence
106 <220> FEATURE:
107 <221> NAME/KEY: misc_feature
108 <222> LOCATION: (611)..(611)
109 <223> OTHER INFORMATION: n = any nucleotide sequence
113 <220> FEATURE:
114 <221> NAME/KEY: misc_feature
115 <222> LOCATION: (1388)..(1388)
116 <223> OTHER INFORMATION: n = any nucleotide sequence
119 <220> FEATURE:
120 <221> NAME/KEY: misc_feature
121 <222> LOCATION: (1390)..(1390)
122 <223> OTHER INFORMATION: n = any nucleotide sequence
125 <220> FEATURE:
126 <221> NAME/KEY: misc_feature
127 <222> LOCATION: (1413)..(1413)
128 <223> OTHER INFORMATION: n = any nucleotide sequence
131 <220> FEATURE:
132 <221> NAME/KEY: misc_feature
133 <222> LOCATION: (1512)..(1512)
134 <223> OTHER INFORMATION: n = any nucleotide sequence
137 <220> FEATURE:
138 <221> NAME/KEY: misc_feature
139 <222> LOCATION: (1568)..(1568)
140 <223> OTHER INFORMATION: n = any nucleotide sequence
143 <400> SEQUENCE: 4
144 cgcagatact gcagagctga cgcattcttt gcctggcatc tcagcttgct aggtgtctca      60
146 tcttcgctct gcgctcgtgg cctcctccaa ggctccagc ctcctttaag aaaactcaag      120
148 acctgggaag ctacgatgcg agcttgatgc cgctacccta gcaggctatg gacttcctga      180
150 gggtcctcgg actgttgaca cccattccga tccgcatect tccaagctga taagcccggg      240
152 accctagggc ggggtgccca gactcatgtg tgacgccttg cagtgaaacc ccattcccag      300
154 tgtggttgct tctttgctgg gctttggccc atttgatacc acgaaggatg acgatgctag      360

```

## RAW SEQUENCE LISTING

DATE: 08/03/2006

PATENT APPLICATION: US/10/541,998

TIME: 09:50:26

Input Set : A:\19020.seq.txt

Output Set: N:\CRF4\08032006\J541998.raw

W--> 156 ttatgcagca gccaacacac ctccccccaa ctctccgctg tcaactggtgg gccccactgt 420  
 158 ccaggaagca ggtgtccgga actgacatct tggagcagag gggccatgag aggtgtgtgt 480  
 160 atcctgccag aaagcagctg gaccacgacg ctcccaagat gaaccactg tatacagagg 540  
 162 catcatggga gttgttatgt caggagcatt ctagaccacac gtgtacttga gcgtggaaag 600  
 164 acagaagana ngcgcagaga ctggggcact tgatctgctc accatgatcg cctgcacggg 660  
 166 tctcatccag ttctgcctt aggctacagt ggcggtgtcc acgggcttgc cattcaacgt 720  
 168 gctctcagac ccagatcggg ctccaccactg aggagaacct ttctactttg gtgggtatgc 780  
 170 agaggaaggg gtctcgactc cagagacctg gagtccaaag tttgtttttt tttatttacc 840  
 172 agtaatttat ttattttttt tattattagt tatgagtcca aagtttaata ccattcaagc 900  
 174 tactgtctgc tgtctgctta gagccacagc atgcaatgtg gcaccaaggc atccttgtcc 960  
 176 tcacagtttc acactgtggg aacaggcatc cttgttctta cagattagcg cgagggaac 1020  
 178 cagaaatatt aaacacgcag ggttgtctct ccaaaggagg aggcacatac cctgttttcc 1080  
 180 tcccgaaggc tgggagcgga ggtgtttgat atcctggcta cctctgtgca atctgtaggc 1140  
 182 catgtcctta agatgtagct gtcagtcggg agtggagccg gagccgtcag tcagtagatt 1200  
 184 ggggttgttg catgcgcctt taactccatt taattccagc actctagtgg tttggtacag 1260  
 186 cagcagcagc agcggttgca gtggcccggg gaagtcctga agaccagctt tcatcccagc 1320  
 188 actcaggcag caaaggcggg tggattctct gaggtcgagg ccggcctggt ctacagagtg 1380  
 190 agtccagncn agccagggct acaacagaga aancctctct attgaaaaat aaataaatta 1440  
 192 taaaaaaaaa aaggtgtcat gtgtcctgtg tactttacaa agaattgtga tgcttaagct 1500  
 194 tttttgtgca cncaagaaaa ttgtttaact ggtgtcagac tcctgaagtt tgaaccagca 1560  
 196 ctttagcngg cgtggtggcg cagcctgta atcccagccc tcgggaggca gaggcagggtg 1620  
 198 gatctctgag ttagaggcca gcctggtcta cagagtgagt ccaggacagc caggattaca 1680  
 200 cagagaaacc ccgtctcaaa aatgtaaaat aaattaaaat aaagtttgaa ccaacagtgt 1740  
 202 ttactgagtc gtgttgaaac agattacctt tttgcttctc tttgatcatt attctactgt 1800  
 204 ggtgtcagca gagaccctc cagcagggtg ccaacgtgag agtctcaagc ccgagaaggt 1860  
 206 aagaatttaa aaaaaaaaaa aaaa 1884  
 209 <210> SEQ ID NO: 5  
 210 <211> LENGTH: 1358  
 211 <212> TYPE: DNA  
 212 <213> ORGANISM: Psammomys obesus  
 214 <220> FEATURE:  
 215 <221> NAME/KEY: misc\_feature  
 216 <222> LOCATION: (385)..(385)  
 217 <223> OTHER INFORMATION: n = any nucleotide sequence  
 220 <220> FEATURE:  
 221 <221> NAME/KEY: misc\_feature  
 222 <222> LOCATION: (416)..(416)  
 223 <223> OTHER INFORMATION: n = any nucleotide sequence  
 227 <220> FEATURE:  
 228 <221> NAME/KEY: misc\_feature  
 229 <222> LOCATION: (430)..(430)  
 230 <223> OTHER INFORMATION: n = any nucleotide sequence  
 233 <220> FEATURE:  
 234 <221> NAME/KEY: misc\_feature  
 235 <222> LOCATION: (507)..(507)  
 236 <223> OTHER INFORMATION: n = any nucleotide sequence  
 239 <220> FEATURE:  
 240 <221> NAME/KEY: misc\_feature  
 241 <222> LOCATION: (754)..(754)

## RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/541,998

DATE: 08/03/2006

TIME: 09:50:26

Input Set : A:\19020.seq.txt

Output Set: N:\CRF4\08032006\J541998.raw

242 <223> OTHER INFORMATION: n = any nucleotide sequence  
 245 <220> FEATURE:  
 246 <221> NAME/KEY: misc\_feature  
 247 <222> LOCATION: (856)..(856)  
 248 <223> OTHER INFORMATION: n = any nucleotide sequence  
 251 <220> FEATURE:  
 252 <221> NAME/KEY: misc\_feature  
 253 <222> LOCATION: (928)..(928)  
 254 <223> OTHER INFORMATION: n = any nucleotide sequence  
 257 <220> FEATURE:  
 258 <221> NAME/KEY: misc\_feature  
 259 <222> LOCATION: (980)..(980)  
 260 <223> OTHER INFORMATION: n = any nucleotide sequence  
 264 <220> FEATURE:  
 265 <221> NAME/KEY: misc\_feature  
 266 <222> LOCATION: (1165)..(1165)  
 267 <223> OTHER INFORMATION: n = any nucleotide sequence  
 270 <220> FEATURE:  
 271 <221> NAME/KEY: misc\_feature  
 272 <222> LOCATION: (1200)..(1200)  
 273 <223> OTHER INFORMATION: n = any nucleotide sequence  
 276 <220> FEATURE:  
 277 <221> NAME/KEY: misc\_feature  
 278 <222> LOCATION: (1273)..(1273)  
 279 <223> OTHER INFORMATION: n = any nucleotide sequence  
 282 <220> FEATURE:  
 283 <221> NAME/KEY: misc\_feature  
 284 <222> LOCATION: (1284)..(1284)  
 285 <223> OTHER INFORMATION: n = any nucleotide sequence  
 288 <220> FEATURE:  
 289 <221> NAME/KEY: misc\_feature  
 290 <222> LOCATION: (1303)..(1303)  
 291 <223> OTHER INFORMATION: n = any nucleotide sequence  
 294 <220> FEATURE:  
 295 <221> NAME/KEY: misc\_feature  
 296 <222> LOCATION: (1305)..(1305)  
 297 <223> OTHER INFORMATION: n = any nucleotide sequence  
 301 <220> FEATURE:  
 302 <221> NAME/KEY: misc\_feature  
 303 <222> LOCATION: (1326)..(1326)  
 304 <223> OTHER INFORMATION: n = any nucleotide sequence  
 307 <220> FEATURE:  
 308 <221> NAME/KEY: misc\_feature  
 309 <222> LOCATION: (1330)..(1330)  
 310 <223> OTHER INFORMATION: n = any nucleotide sequence  
 313 <400> SEQUENCE: 5  
 314 gttgggaaag aatgaagaaa caaccgatg aatagaaatg aaaagcctaa gccaaatgga 60  
 316 tttctgttga gatgttggat gaaaacaagt atccactgtt taccaacttg acgaaaaatc 120  
 318 tcaactgagg tttggctgtt aaaaaaaaaa attcactgtg gcctctgtgc ttaattgtcg 180

## RAW SEQUENCE LISTING

DATE: 08/03/2006

PATENT APPLICATION: US/10/541,998

TIME: 09:50:26

Input Set : A:\19020.seq.txt

Output Set: N:\CRF4\08032006\J541998.raw

W--> 320 taaaccattg tgactgttac tgctcaaagt atcgactgtg tcattagtaa ctacatcaga 240  
 322 attgcaccgc tgctgttgga aaagccaata aagaaacccc cagactgctg ctcagcaaat 300  
 324 gttaataaag tgtgcgaccc gtaggcctgt ccaccagtc accaagcagc gtccctttgt 360  
 326 ctgcgagtgg ctgtgggtgt gattnaccac ctcagaggtg cacagcacct gcttgngccc 420  
 328 ttaagtgtgn gtcagaagac aagcagcttc tcggtaacca acaacctgct tttcggagct 480  
 330 cagtgttttag gctgtttact gaatcanata tgtaactcag cacacataag cgaagagaga 540  
 332 ttttggtctgc actggcaaga gtgaaccaa tttacttcta ttttttaaag gcagatcata 600  
 334 ttaagcata taagtaattt atggatataa attgttggat atttatttta gtctgaatat 660  
 336 ttgtttttta attattacat gtgttctcta tgtctttatc tctggaataa cgatgccatt 720  
 338 aaccacatgg ccatatgttt tgaaagtgg gtgnaacaga ggaaaagtca tccttcttgg 780  
 340 ttcttgactc cctttcctca actacatgat aagtctatca ataaagcatt tgacctcagc 840  
 342 aggggcagaa gcctgnaaag ttagaaaact cattgaccac agtagacaat tgattttctta 900  
 344 gaaataagaa gtgagaagca gctgctgngc tgagcagggg atgtaaacca agtccagatg 960  
 346 caccaacgtg aagaggcttn tagcaaaaat atgtttgct ctcacccctg cacatgttct 1020  
 348 agatgcttaa aaacagccac atggccccgc tgcgaggacc tcgtaatgtt gttgttgttg 1080  
 350 ttgttgttgt taaaggagtt ctcacaagcg tacaagtga gcaactgaaag tggctgaggg 1140  
 352 ccacagtctc cagcacccaa gtctnttccg cagcacgcca agctgggtgt gtccgggtgn 1200  
 354 gtatgtctgt gctcagtgcc aagctgggtgt ttggtcccggt tgtatattat gtgccccaa 1260  
 356 tgttttgggg canagctgac ccangctgga cacacttctt ttngncttcg agtttactgg 1320  
 358 ttgatncagn taaaaataaa ttaattaatt aaagactt 1358

361 <210> SEQ ID NO: 6  
 362 <211> LENGTH: 390  
 363 <212> TYPE: DNA  
 364 <213> ORGANISM: Psammomys obesus  
 366 <220> FEATURE:  
 367 <221> NAME/KEY: misc\_feature  
 368 <222> LOCATION: (3)..(3)  
 369 <223> OTHER INFORMATION: n = any nucleotide sequence  
 372 <220> FEATURE:  
 373 <221> NAME/KEY: misc\_feature  
 374 <222> LOCATION: (9)..(9)  
 375 <223> OTHER INFORMATION: n = any nucleotide sequence  
 378 <220> FEATURE:  
 379 <221> NAME/KEY: misc\_feature ? "C" is at 60 (see p.6)  
 380 <222> LOCATION: (60)..(60)  
 381 <223> OTHER INFORMATION: (n) = any nucleotide sequence  
 384 <220> FEATURE:  
 385 <221> NAME/KEY: misc\_feature "a" is at 71  
 386 <222> LOCATION: (71)..(71)  
 387 <223> OTHER INFORMATION: (n) = any nucleotide sequence  
 390 <220> FEATURE:  
 391 <221> NAME/KEY: misc\_feature "a" is at 91  
 392 <222> LOCATION: (91)..(91)  
 393 <223> OTHER INFORMATION: (n) = any nucleotide sequence  
 396 <220> FEATURE:  
 397 <221> NAME/KEY: misc\_feature "g" is at 113  
 398 <222> LOCATION: (113)..(113)  
 399 <223> OTHER INFORMATION: (n) = any nucleotide sequence  
 402 <220> FEATURE:

see p.6

<220>  
 <221> misc\_feature *c is at 388*  
 <222> (388)..(388)  
 <223> *n* = any nucleotide *sequence*

<220>  
 <221> misc\_feature  
 <222> (524)..(524)  
 <223> *n* = any nucleotide *sequence*

<220>  
 <221> misc\_feature  
 <222> (527)..(527)  
 <223> *n* = any nucleotide *sequence*

*there are only 390  
 nucleotides in this  
 sequence*

<400> 6  
 gtngaagcnt aggagttcga ggatgcgccc gatgtcgagc cgctggaacc cacgcttagc 60  
 aatatcatcg agcagcgag ccttaagtgg atcttcgtcg ggggcaaggg tggcgttggt 120  
 aagaccacct gcagctgcag cctggcggtc cagctgtcta agggacgtga gagtgttcta 180  
 atcatttcca cagaccagc tcacaacatc tcagatgcat ttgaccagaa gttctccaag 240  
 gtgcctacca aggtcaaagg ctatgacaac ctctttgcta tggagataga cccgagcctg 300  
 ggcgtggcag agctccctga tgaagttctt cgaggaagac aacatgctga gcatgggcaa 360  
 gaagatgatg caggaggcca tgagcgctt 390

RAW SEQUENCE LISTING ERROR SUMMARY  
PATENT APPLICATION: US/10/541,998

DATE: 08/03/2006  
TIME: 09:50:27

Input Set : A:\19020.seq.txt  
Output Set: N:\CRF4\08032006\J541998.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; N Pos. 336  
Seq#:4; N Pos. 609, 611, 1388, 1390, 1413, 1512, 1568  
Seq#:5; N Pos. 385, 416, 430, 507, 754, 856, 928, 980, 1165, 1200, 1273, 1284, 1303  
Seq#:5; N Pos. 1305, 1326, 1330  
Seq#:6; N Pos. 3, 9  
Seq#:7; N Pos. 524, 527  
Seq#:8; N Pos. 60  
Seq#:9; N Pos. 71, 91, 113, 388



**VERIFICATION SUMMARY**

PATENT APPLICATION: US/10/541,998

DATE: 08/03/2006

TIME: 09:50:27

Input Set : A:\19020.seq.txt

Output Set: N:\CRF4\08032006\J541998.raw

L:41 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:300  
L:164 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:600  
M:341 Repeated in SeqNo=4  
L:326 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5 after pos.:360  
M:341 Repeated in SeqNo=5  
L:422 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:6 after pos.:0  
L:471 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:7 after pos.:480  
L:501 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8 after pos.:0  
L:548 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:60  
M:341 Repeated in SeqNo=9